

# PROSPECTS FOR GROWTH IN JAPAN IN THE 21ST CENTURY

## INTRODUCTION

The past four years have generated a challenging and uncertain environment for Japan's people and leadership. Its political and economic practices are being examined internally as well as worldwide, the latter stemming from the economic stagnation that began there in 1992 and ended with a strong rebound in first quarter 1996. Rapid changes in the global economic environment, technology, the integration of business practices worldwide, and fundamental changes in modern enterprises have upset the rigid and traditional systems of Japan, and there is uncertainty about the direction in which the country will go in order to recover from these waves of change. A country famous for its efficiencies and profitable strategies, Japan has been overwhelmed by rising competitiveness of other world producers and the cost of carrying a very large and extremely inefficient non-traded goods sector -- the cost of which has gone up with long-term yen appreciation. Corporate restructuring seems to have paid off for U.S. businesses, while Japan appears to be just arriving at the realization of the need for a major reappraisal of how its economy functions.

From the 1950s onward, Japan pursued an extremely successful growth strategy, one that has been emulated by other countries in Asia. This strategy was based on high levels of savings and externally driven (export demand) growth, and was supported by a variety of government policies, including restrictions on imports, maintenance of an undervalued currency, incentives to save, targeted investment, and promotion of key traded sectors of the economy.

Institutional factors have played an important role in the structure of Japan's growth. In particular, its *keiretsu* system helped to channel investments into a relatively small number of highly competitive domestic firms. This system helped to rebuild the Japanese economy after World War II, and then shifted to help create highly competitive exporters. Foreign investment was discouraged in Japan. By funneling resources into export industries, Japan created in some ways a dual economy, with less efficient industries that supply domestic consumers -- private and public -- along with a competitive export sector.

The severe recession and subsequent stagnation beginning in 1992 have raised questions about how fast Japan can grow in the medium to longer term. In the current world environment, Japan's past growth strategy appears less appropriate. The world economy is becoming increasingly integrated, and technological changes are occurring at a rapid rate. These forces are affecting the way national economies are organized, as well as their competitiveness and prosperity. Integration and technology have caused major restructuring in U.S. firms and in the U.S. economy over the past decade, and are expected to have a similar impact on other countries.

Boundaries between national markets are disappearing, as decreasing transportation costs over the last century have enabled information, products, and people to be transferred easily to new countries, cultures and markets, and encouraged greater trade among countries. For example, U.S. exports of goods and services have risen as a share of Gross Domestic Product from 8 percent in 1980 to 13 percent in 1995. Rapidly growing foreign direct investment among countries, too, has further reduced the importance of national economic boundaries, changed the nature of competition, and increased the pace of diffusion of new technologies and new management techniques into the world economy. The United States is the largest source and host country of foreign direct investment in the world. Japan is also a major source country, but one of the smallest host countries.

New technologies -- the advent of computers, flexible automation, information-based services, design automation, and numerous other technological advances -- have made it possible for companies to increase their market responsiveness and cost-effectiveness. More recently, new information technologies have reduced the cost of information processing and management. The traditional corporate pyramidal organization is shifting, and the tasks of supervision and production are being merged. When mass production ruled, competitive advantage lay in fragmenting work, highly specialized tasks, and managing via hierarchical bureaucracy.<sup>1</sup> Successful firms now are depending less on scale, and relying more on time-based competition, responsiveness to customers and the market, flexibility and customization in production, and better use of assets. In fact, entire industries (finance, retail, airlines) are now driven by their ability to manage and process information efficiently.

Advances in information technologies are facilitating the current restructuring of U.S. firms, outsourcing, and value-added partnerships. The technologies have given firms greater flexibility, enabling them to produce using fewer (physical or financial) assets. The need for centralized coordination has been reduced, easing direct coordination among producers and suppliers, and between joint venture partners. Information technologies have led to decreases in firm size and lower employment per firm.<sup>2</sup>

The major restructuring in the United States appears to be paying off, presenting the challenge to Japanese businesses to make the necessary corporate changes to compete in world markets. U.S. labor is more efficient. U.S. unit labor costs have risen more slowly than in Germany or Japan because of new efficiencies of technology. Anecdotal evidence suggests that productivity gains have resulted from corporate restructuring, although a relationship between the two has not been quantitatively established. Estimates of growth in U.S. labor productivity have been cited as evidence of the importance of corporate restructuring. These estimates show a steady rise over the last ten years, from a 2.7 percent average annual

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<sup>1</sup>Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution* (New York: Harper Collins, 1993).

<sup>2</sup>Erik Brynjolfsson, Thomas W. Malone, Vijay Gurbaxani, and Ajit Kambil, "Does Information Technology Lead to Smaller Firms?" *Management Science*, Vol. 40, No. 12, December 1994.

manufacturing productivity growth between 1985-90, to 3.1 percent between 1990 to 1994, and 4.2 percent in 1994. Companies that have adopted new technologies, and innovative customer, competitive, and change-oriented business practices have been successful -- Microsoft, Home Depot, Hewlett-Packard, Intel, Southwest Airlines and VF Corporation are just a few examples. IBM, once the model of an efficient, effective organization, also has moved away from a hierarchical, life-time employment structure, shedding parts of its businesses and many workers toward a smaller, technologically innovative organization.

New technologies and innovative business practices must, however, be coupled with an open market. The success of leading U.S. sectors depends also on access to resources or skills from abroad -- in other words, openness of the world economy. These changes can be expected to affect Japan, too. Japan's past reliance on promoting export growth and protecting home markets is likely to be an ineffective strategy in revitalizing its economy. This strategy, encumbered by many government rules, limits the flexibility and quick response time required to compete in a world of rapidly changing technologies and rising competitiveness of other nations' producers.

This paper examines the challenges Japan faces today and the role of structural change in Japan's economic growth. It first reviews historic conditions and Japan's past growth strategies, and then assesses its current conditions. Next, it analyzes short- and longer-term trends in Japan that are limiting its growth prospects, impacts on the U.S. economy, and options for regaining its growth potential. Lastly, it considers Japan's outlook for change. This paper covers the period 1950 to the most recent data available by August 1996.

## RECENT HISTORY OF THE JAPANESE ECONOMY

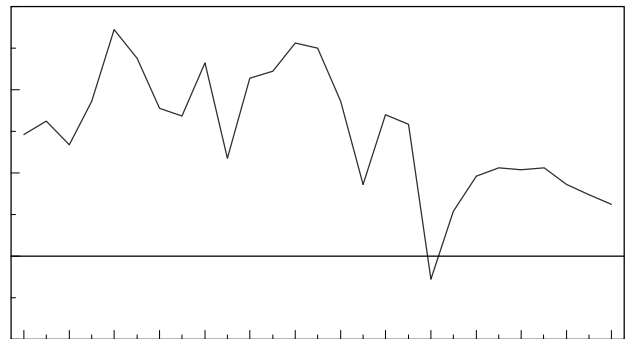
Japan experienced a high level of economic growth between the 1950s and the 1973-74 oil embargo, averaging 10 percent real gross national product (GNP) growth a year, but then slowing to an average rate of 5 percent between 1975 and 1990. It now shows signs of serious difficulties in the 1990s in obtaining growth much higher than two-to-three percent a year. This chapter reviews the characteristics of past Japanese growth strategies, examining the major sources of rapid Japanese growth, the role played by government policies and its corporate structure in enhancing this growth, and factors contributing to the fall in its growth rate after the 1970s energy crises and, more recently, the financial bubble.

### SOURCES OF GROWTH

A number of factors enabled Japan to sustain high rates of economic growth between the early 1950s and the early 1970s. Key factors were Japan's high saving rate, government policies -- reforms, macroeconomic, and industry -- and its corporate structure.

#### High Saving Rate

Japan's high saving rate was critical to its rapid growth. Net national saving was nearly 25 percent of GDP in the 1960s and 1970s. A variety of determinants have been considered to explain this high level of saving, including: (1) Japan's underdeveloped social security system encouraged high saving for retirement; (2) its bonus system made saving easier than otherwise; (3) people underestimated Japanese economic growth during the 1950s and 1960s, and saved more than planned; and, (4) the low ratio of elderly to working-age population until recently kept Japanese saving high as people smoothed out their lifetime consumption (life cycle hypothesis).<sup>3</sup> Whatever explanation is used, the government facilitated high saving by:




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<sup>3</sup>Kazuo Sato, "Saving and Investment," in *The Political Economy of Japan, Vol. 1: The Domestic Economy*, edited by Koza Yamamura and Yasukichi Yasuba (Stanford, Ca.: Stanford University Press, 1987), pp.153-165; Takatoshi Ito, *The Japanese Economy* (Cambridge: The MIT Press, 1992), pp. 259-277. Economists disagree on the importance of each of these explanations.

- exempting taxes on income from bank and postal savings deposits for small deposits (although interest rates paid on deposits were kept low), and keeping the tax burden relatively low on property income and capital gains;
- strictly regulating capital markets, keeping them immature and raising transactions costs for non-financial sectors, and thus encouraging households especially to put their savings into safe assets such as bank and postal saving deposits.<sup>4</sup>

This saving was then mobilized to supply the strong growth in investment, to modernize and increase Japan's productive capacity with state-of-the art machinery and equipment. The high level of domestic saving initially provided a large share of domestic financial capital, and, by the 1980s, continued at such a high rate that Japan became a major net capital exporter to the world. This surplus of saving allowed Japanese industry to finance its investments without borrowing from abroad and helped to limit the vulnerability of the domestic Japanese economy to external shocks, such as an oil crisis or rapid exchange rate changes.<sup>5</sup>

### Government Policies

At the end of World War II, several key government reforms provided the framework that encouraged long-term Japanese growth. Pressured by the Allied Occupation Forces, the Japanese government instituted a variety of economic reforms: land reform redistributed wealth and helped to create a middle class; anti-trust measures reduced monopolistic controls by large companies in many markets and encouraged investment; and labor reform gave labor the right to unionize on a plant level and engage in collective bargaining. In addition, a well-educated labor force was ensured with the reform of the educational system, requiring all children to attend nine years of public education.<sup>6</sup>

Macroeconomic policies also were important in promoting growth. The Japanese government maintained a relatively stable macroeconomic environment, which encouraged domestic investment and exports. It pursued a conservative fiscal policy while maintaining a balanced budget, in part because it was prohibited from issuing deficit bonds (until 1965). A balanced budget minimized government competition for investment funds needed by the private sector. A fiscal deficit did not begin to rise until 1975 following the first oil embargo of 1973-74. The ratio of deficit to GNP peaked in 1979, and fell steadily in the first half of

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<sup>4</sup>Koichi Hamada and Akiyoshi Horiuchi, "The Political Economy of the Financial Market," in *The Political Economy of Japan, Vol. 1: The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba (Stanford, Ca.: Stanford University Press, 1987), pp. 230-260.

<sup>5</sup>Ito, pp. 61-64; Sato, pp. 137-141.

<sup>6</sup>Ito, pp.43-67.

the 1980s when the government tried to balance efforts to control the deficit and combat the recessionary effects of the second oil shock. It finally balanced the budget again by 1990.<sup>7</sup>

Japan's monetary and exchange rate policies also helped to expand investment and exports. The Japanese monetary authorities kept inflation low. The government's foreign exchange reserves and its exchange rate policy constrained the growth of domestic consumption. During the 1950s and 1960s, the government maintained a fixed foreign exchange rate of ¥360 to \$1.00, set in 1949 in keeping with the Bretton Woods, U.S. dollar-based system. Key to the system were tight capital controls that prevented a large influx of foreign capital that would have pushed the yen higher or financed a larger inflow of imports. This policy reduced both domestic demand and inflationary pressures, and also kept Japanese exports competitive in world markets. This exchange rate policy was maintained until 1971, when Japan revalued the yen, and in 1973, it moved to a floating rate.<sup>8</sup> Its sharp appreciation in later years suggests that the yen was undervalued prior to 1973. The Japanese government's policy of maintaining a fixed and undervalued exchange rate depressed imports and domestic consumption to the advantage of exports.

Until the mid-1970s, highly regulated capital markets kept funds in Japan, and allowed the government to direct their use. Regulations ranged from limits on capital inflows and outflows, interest-rate controls on both deposits and loans, and lending-limit controls. Low rates paid on deposits may have placed a drag on savings, but the absence of other readily available places to deposit savings and tax rules that encouraged saving counterbalanced this effect. Lending limits allowed monetary authorities to allocate loans to specific industries or groups of firms. "Window guidance" was used by the Bank of Japan to control the major channel of funds through banks.<sup>9</sup> Moreover, the collection and distribution of postal saving accounts, set up to provide a "fair" opportunity to invest funds for all depositors, especially small depositors, gave the government considerable control over public and private investments.

### Government Industrial Policies

In the 1960s and the 1970s, the Japanese government policies mobilized resources to promote the growth of specific industries deemed important to the overall Japanese economy. These were "... policies and methods used primarily to increase the productivity of factor inputs and to influence, directly and indirectly, the investment (and disinvestment) decisions

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<sup>7</sup>Ito, pp. 60-67, 165-167.

<sup>8</sup>Ito, pp. 45-46, 313-315.

<sup>9</sup>Hamada and Horiuchi, p. 223-260.

of industries."<sup>10</sup> These policies assisted two types of industries. The first type were key sectors deemed important to the overall economic growth, with initial emphasis on heavy industries such as steel and coal and later, high-technology industries, such as semiconductors and computers. Industries selected for promotion fit the following characteristics: (1) high potential productivity growth; (2) large income elasticity of demand so that demand would be expected to rise substantially with world economic growth; and (3) related industries that would provide additional growth and employment.<sup>11</sup> Second, adjustment assistance was provided for declining industries. Policies for each type of industry overlapped, and included:

- Trade protection and export promotion, especially of heavy industry products;
- Allocations of foreign exchange to buy capital equipment and raw materials;
- Subsidized loans to build new plants;
- Special tax benefits, such as special loss reserves, tax-free reserves (tax deferrals), and special depreciation measures;
- Exemption from anti-trust regulations;
- Labor market adjustment measures; and,
- Assistance to firms to adopt new technologies, to acquire needed foreign technologies and to undertake R&D.<sup>12</sup>

Supplementing these policies, monetary authorities are said to have maintained low lending interest rates to promote investment and in fact, helped to direct investment funds, or ration credit, to growth industries, especially those that were export-oriented.<sup>13</sup>

### Corporate Structure and Linkages

The corporate structure that developed in Japan after World War II, in conjunction with government policies, also played an important role in Japan's growth. With the dissolution of the old *zaibatsu* families of holding companies that controlled about a quarter of corporate capital at the end of the war, a new system of enterprise groups, the *keiretsu*, took its place. This system links members of a group -- manufacturing firms, trading companies, insurance companies, and banks -- through measures including interlocking shares of stock, preferential access to investment capital, sharing of executives, shared planning of product

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<sup>10</sup>George C. Eads and Kozo Yamamura, "The Future of Industrial Policy," in *The Political Economy of Japan, Vol. 1: The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba (Stanford, Ca.: Stanford University Press, 1987), pp. 424-425.

<sup>11</sup>Masahiro Okuno-Fujiwara, "Industrial Policy in Japan: A Political Economy View," in *Trade With Japan: Has the Door Opened Wider?*, edited by Paul Krugman (Chicago: University of Chicago Press, 1991), pp. 278-279.

<sup>12</sup>For more extensive discussion of past and current policies, see Ito, pp. 67-72; Okuno-Fujiwara, pp. 271-303; and Jimmy W. Wheeler, Merit E. Janow, and Thomas Pepper, *Japanese Industrial Development Policies in the 1980's: Implications for U.S. Trade and Investment* (Croton-on-Hudson: Hudson Institute, Inc., 1982); Eads and Yamamura, pp. 423-468.

<sup>13</sup>Hamada and Horiuchi, p. 238. Although this view is held of both Japanese and foreign scholars, Hamada and Horiuchi argue that the procedures and effectiveness of these procedures have to date not been adequately explained.

development and production operation, and long-term buying-selling relationships. Two major types of *keiretsu* developed. The first, the horizontal or financial *keiretsu*, is composed of diverse companies spanning several industries, closely tied to a former zaibatsu group or a main bank. The six largest are Mitsubishi, Mitsui, Sumitomo, Fuyo, Daiichi-Kangyo Bank (DKB), and Sanwa. These groups provide to their member firms information, loans, and members of the board of directors. The second type, the vertical *keiretsu* system, has members in a single industry or a few industries with a prime manufacturer buying from parts and components suppliers and selling to member wholesalers and retailers. The prime manufacturer and its subcontractors maintain a stable, exclusive, and long-term relationship, sharing information and technology.<sup>14</sup> Both forms of *keiretsu* continue today.

This system provided a number of benefits to its members, although not necessarily the overall economy. First, the *keiretsu* system of inter-corporate share holding compensated for an underdeveloped capital market that diversified risk (a market that in some ways still exists). Second, members were able to pursue long-term strategies without the discipline of a stock market and the pressure to pay dividends and maximize share price.<sup>15</sup> This insulated management from outside control or unfriendly takeovers. Third, it provided a safety net, employing excess workers and supplying financial reserves in case of losses and other rescue activities. In addition, it facilitated risk-sharing on large investment projects.<sup>16</sup> Fourth, some argue that the *keiretsu* system allowed members to reduce their tax liability by keeping the size of the firm, and the tax rate, small -- small firms are taxed at a rate approximately ten percent lower than large firms.<sup>17</sup>

However, the *keiretsu* system has imposed costs on its members. Maintaining relationships in the system has limited the flexibility of a member in its purchases, sales and financing options. These limitations have become increasingly important as the structure of the domestic and world economy has changed.

These corporate groups developed after World War II in part because Japanese firms sought to re-form the old *zaibatsu* and also because government regulations rationed foreign

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<sup>14</sup>For additional discussion, see Ito, pp. 175-196; Dick K. Nanto, *Japan's Keiretsu: Industrial Groups as Trade Barriers*, CRS Report for Congress, Congressional Research Service, the Library of Congress, January 30, 1994; Masahiko Aoki, "The Japanese Firm in Transition," in *The Political Economy of Japan, Vol. 1: The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba (Stanford, Ca.: Stanford University Press, 1987), pp. 263-288.

<sup>15</sup>Dividends are paid as a stable percentage of par value of stocks, not profits. See Masahiko Aoki, *Information, Incentives and Bargaining in the Japanese Economy* (New York, Cambridge University Press, 1988), p. 138.

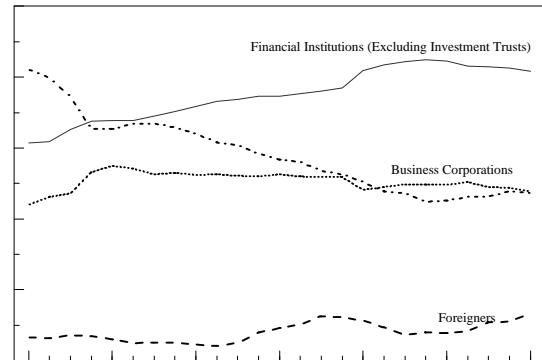
<sup>16</sup>Masahiko Aoki, "The Japanese Firm in Transition," pp. 272-282; Masahiko Aoki, *Information, Incentives and Bargaining in the Japanese Economy*, (New York, Cambridge University Press, 1988), p. 135-138. Professor Aoki indicates that Japanese taxes also may contribute to lack of concern about share price -- taxes paid on dividends range from 20-35 percent while those on capital gains are not taxed -- and encourage firms to retain earnings.

<sup>17</sup>David E. Weinstein, "Foreign Direct Investment and *Keiretsu*: Rethinking U.S. and Japanese Policy," paper prepared for *NBER Conference on The Effects of U.S. Protection and Promotion Policies*, February 1996.



exchange and tightly controlled corporate access to investment funds. These heavy government regulations and collateral requirements have continued to limit corporate access to equity and bond financing, and made association with banks important, particularly during the high growth period prior to 1980. They also have hindered the development of bond and corporate paper markets in Japan. Studies indicate that prior to the 1980s, dividends on stocks were often higher than the cost of borrowing from banks, especially to those firms with access to bank funds.<sup>18</sup> Moreover, the main bank system, with interlocking share-holding, has encouraged financial flows between banks and firms, and the insurance of rescue by the main bank in times of financial distress has given firms an incentive to be less financially conservative.

Shares Ownership by Type of Investors



Source: Tokyo Stock Exchange Fact Book 1995

While the corporate linkages seem to be loosening, the extent that changes have taken place is difficult to measure. Members of vertical *keiretsu* have sought to improve efficiency and reduce costs by buying from firms outside of the family, setting up overseas facilities, and entering joint ventures with foreign firms. Subcontractors, on the other hand, have moved to strengthen management, reduce dependence on the parent firm for sales, and increase technical capabilities and technology advantages.<sup>19</sup> Another factor loosening *keiretsu* ties has been the increase in competition in Japanese markets, partly as a result of the revision and enforcement of the Antimonopoly Law of 1977, the stagnation of basic industries, and the development of new high-technology industries dominated by small-scale production and high R&D intensity.<sup>20</sup>

Similarly, the ties among members of the horizontal *keiretsu* appear to be changing, according to press reports. Banks are struggling to dispose of a large volume of problem loans accumulated during the recent "bubble" economy (during which asset prices rose

<sup>18</sup> David M. Meerscham, "The Japanese Financial System and the Cost of Capital," in *Trade with Japan: Has the Door Opened Wider?* edited by Paul Krugman (Chicago: The University of Chicago Press, 1991), p. 201. Dividends were traditionally paid as a percentage of par value, rather than the market value, of the stocks, and thus, did not necessarily reflect the performance of the firm.

<sup>19</sup> D. Hugh Whittaker, "SMEs, Entry Barriers, and 'Strategic Alliances'," in *The Japanese Firm: Sources of Competitive Strength*, edited by Masahiko Aoki and Ronald Dore (New York, Oxford University Press, 1994), pp. 210-212.

<sup>20</sup> Masu Uekusa, "Industrial Organization: The 1970s to the Present," in *The Political Economy of Japan: Volume 1, The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba (Stanford, CA., Stanford University Press, 1987), pp. 481-486.

dramatically).<sup>21</sup> Financial press reports indicate that the 21 biggest banks have been net sellers of stocks in an effort to free up capital to write-off these debts, and that in turn, the top 100 corporations have been selling shares of bank stocks.<sup>22</sup> The extent of cross-holding as a percent of total market capitalization of the Tokyo Stock Exchange first section stocks, however, cannot be measured directly,<sup>23</sup> and estimates show only very small declines in the 1990-93 period. The clearest indicator of changes in the pattern of cross holdings is the large increase in foreign holdings of Japanese stocks, rising from 3.9 percent in 1989 to 6.7 percent in 1994. The seed for changes in the ties between banks and financial institutions (excluding investment trusts) and group firms was planted in 1975 when the government began lifting regulations of financial institutions -- relaxing the ceiling on government and corporate bonds, legalizing warrant bonds, and allowing issuance of unsecured bonds by more and more firms.<sup>24</sup> Nonetheless, it may be too early to draw conclusions that these observed changes in share holdings reflect a trend in inter-corporate share holding in horizontal *keiretsu*, or about how rapidly continued changes might occur.

## **SLOWDOWN IN GROWTH**

### The 1970s: Energy Crises, Technology Gap, and Fixed Exchange Rate

Government policies, particularly industrial policies, seem to have contributed to the high rates of growth prior to the 1970s, but their influence appears to have diminished thereafter. In the 1970s, Japan's growth slowed dramatically -- falling from an average growth rate of about 10 percent to 5 percent a year. Several related factors contributed to the fall in its growth rate.

First, labor costs had been rising since the late 1960s, as labor markets tightened. However, following the oil embargo in 1973-74, the Japanese economy suffered from high inflation and rising unemployment for several years. The rate of investment slowed, as a consequence. The high price of oil created structural problems for the economy as many of its producers, especially those in heavy industries and other major consumers of energy,

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<sup>21</sup>See section entitled "The Causes of The Bubble" for more complete discussion.

<sup>22</sup>Jathan Sapsford, "Cross-holding System in Japan Shows Strains; Banks Sell stakes in Firms, and Concerns respond by Selling Bank Stocks," *Wall Street Journal*, August 25, 1994, Section A, p. 8.

<sup>23</sup>Seiji Ogishima, "Recent Trends in Japanese Stock Cross-Holding," *Nomura Research Institute Quarterly*, Autumn, 1994, pp. 82-101; Seiji Ogishima, "Changes in the Structure of Share-holding and their Market Impact," *Nomura Research Institute of America, Japanese Equity Research*, No. J95-56, June 27, 1995, pp. 1-32.

<sup>24</sup>Takeo Hoshi, Anil Kashyap and David Scharfstein, "Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships," in *Asymmetric Information, Corporate Finance, and Investment*, edited by R. Glean (Chicago: University of Chicago Press, 1990), pp. 108-110.

adjusted to increased oil costs, moving away from high growth sectors toward those conserving energy and controlling pollution.

Second, the oil crises also pointed out the heavy dependence of the Japanese economy on imported petroleum and other raw materials. Investment declined as the outlook for future growth became pessimistic. Reduced investment reduced both current demand and future capacity.

The third factor limiting its growth rate was that Japan had greatly narrowed the technology gap with the United States and Europe, and thus, gains from its own technology innovation and technology spillovers from foreign research were slowed.<sup>25</sup> This narrowing is reflected, in part, in estimates of Japan's total factor productivity growth since 1960: it was 3.3 percent between 1960-65; 5 percent between 1965-70; 2.1 percent between 1973-75; 1.1 percent between 1975-80; and 0 percent between 1980-85.<sup>26</sup>

Fourth, the shift from a fixed exchange rate policy to a floating exchange rate limited growth. An undervalued yen had allowed unbalanced domestic growth, encouraging rapid growth in the highly competitive export sectors, probably to the detriment of the non-traded sectors. The yen was revalued in 1971 when the gold convertibility of the U.S. dollar was suspended, and began to float in 1973 along with other major world currencies. The yen appreciated, and the competitiveness of Japanese exports fell. During this period, Japan attempted to continue its export growth strategy, and trade surpluses created conflicts with its trading partners. Pressures from its trading partners to further liberalize its markets and reduce trade protection of many of its industries have been only partially successful. The floating exchange rate, nonetheless, encouraged lifting capital controls and liberalizing financial markets over the 1970s and 1980s, by pointing out how these regulations restricted trade and domestic investment growth.

With the 1970s slowdown in growth, the Japanese government shifted the focus of its policies. It began moving from detailed control over industries to "soft" policies such as coordinating private incentives and gathering and disseminating information. The emphasis shifted from promoting only growth-oriented, basic industries toward energy-conserving, pollution-reducing, and knowledge-intensive industries. Direct intervention declined, and policies began taking the form of assistance to depressed areas in Japan, to industries suffering from structural changes resulting from the oil shocks, and to workers wanting to relocate and retrain themselves.

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<sup>25</sup>Ito, pp. 67-72, 313-321; Okuno-Fujiwara, pp. 280-282.

<sup>26</sup>See Dale W. Jorgenson, "Productivity and International Competitiveness in Japan and the United States," *Economic Studies Quarterly* (December 1992), pp. 291-297. Technology is one of the factors included in estimates of total factor productivity.

The government also stepped-up its promotion of domestic R&D. During the 1980s, it increased direct and indirect R&D subsidies and encouraged R&D efforts to improve productivity with cost-reduction technologies and to encourage risky R&D by the private sector. Although the level of direct government support has been small relative to other industrial countries, the government has used coordination incentives to promote private R&D. One well-known incentive is the technology research associations set up to solve a specific technology problem, usually with some government support. These associations are organized to meet specified targets and dissolved after a given period. The best known and most successful is probably the Very Large Scale Integrated Circuits Association of five Japanese computer companies, working together between 1976 and 1979, with the goal of developing high-density, high-speed semiconductors.<sup>27</sup>

### The Financial Bubble

The dramatic rise and fall of asset prices during 1986-90 is one of the most important economic events in recent Japanese history. Many believe that this financial "bubble" caused many current economic problems, and most economists believe the increases in asset prices in that period were not supported by economic fundamentals. Asset price inflation far exceeded the price increases of other goods and services, and could not be explained by the underlying strength of the economy.

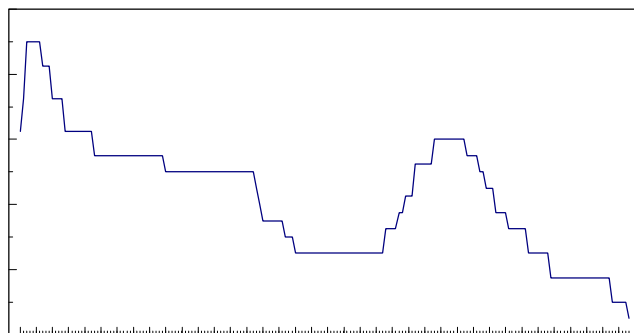
- The Nikkei 225 Stock Average tripled in less than four years, rising from 13,113 in early 1986 and peaking at 38,915 in late 1989. In October 1987, the Tokyo stock market suffered only minor losses, unlike most other major stock exchanges. By the end of 1987, the Japanese equity market accounted for 41.7 percent of total world stock market capitalization, exceeding the share of any other country.
- Land prices in the Tokyo metropolitan area rose by an annual average of 22 percent during 1985 to 1990, compared with a 7.0 percent annual average in the 1980-85 period. Total market value of land in Japan rose from 290 percent of nominal GNP in 1980 to 560 percent in 1990.

The rise in stock prices outpaced the growth in company earnings, leading to significant increases in price-to-earnings and price-to-dividends ratios. This fall in the cost of equity capital, combined with high business expectations and low interest rates, led to a boom in fixed investment and strong GDP growth. During 1987 to 1990, fixed investment in real terms rose by an annual average of 9.9 percent, significantly higher than the 1977-86 average of 3.3 percent. The fixed investment to GDP ratio rose steadily from 27.3 percent in 1986 to 32.2 percent in 1990.

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<sup>27</sup>Wheeler, et. al., pp. 1-13; Okuno-Fujiwara, pp. 280-285.

The Causes of The Bubble. A primary cause of the investment boom and asset price inflation in Japan in the second half of the 1980s was the Bank of Japan's expansionary monetary policy. The Bank of Japan eased monetary policy to slow the appreciation of the yen that occurred in the months following the Plaza Accord in September, 1985, and the slump in the economy. Monetary authorities reduced the official discount rate from 5 percent to 2.5 percent between January 1986 and February 1987. Low interest rates encouraged investment in stocks and real estate. Although the economy began recovering in 1987 from a recession in 1986, additional monetary easing followed the October 1987 Black Monday, as major industrial countries coordinated monetary policies. In addition, the sharp rise of the yen in 1985-86, following the Plaza Accord, resulted in an expectation of further yen



Source: Economic Statistics Monthly, Bank of Japan

appreciation.<sup>28</sup> The exchange rate risk, combined with the decline of other major stock exchanges, encouraged Japanese investors to raise the shares of domestic investment in their portfolios. Japanese net overseas portfolio investment, after rising sharply to \$102 billion in 1986, fell dramatically in the following few years.

During the bubble years (1986-1990), other factors, besides an expansionary monetary policy, also contributed to asset price inflation. First, the economy was growing during this period -- real GDP rose at a rate of 25 percent and corporate profits rose 69 percent over the period. This growth, accompanied by deregulation and structural changes as a result of a stronger yen, may have strengthened expectations for future growth. Another important factor was Japanese tax policy. Japanese taxes on land exacerbated the problem, restricting the supply of real estate available for purchase. Land holdings are taxed less heavily than other assets (low property assessments and low inheritance taxes), while high capital gains taxes discourages sales.<sup>29</sup> The rise in the stock prices of Japanese companies, with large land holdings, reflected the belief that the value of these land-holdings, carried at book value, would continue to increase.<sup>30</sup>

The Bursting of The Bubble And Its Aftermath. Concerned over inflation, the Gulf War crisis, and the long term impact of the bubble, the Bank of Japan sharply tightened monetary policy in 1990, and raised the discount rate to six percent. The Bank maintained tight monetary policy in 1991, keeping interest rates high while investment and output began to slow down. Tight monetary policy helped to precipitate a prolonged recession. Output growth stagnated after 1992, and the most dramatic phenomena of the bubble were reversed:

- After reaching a record high of 38,915 near the end of 1989, the Nikkei stock average dropped almost 50 percent to 19,723 at the end of 1994;
- The average price of land in six major cities fell 39 percent between 1991 and 1994; and,
- Total fixed investment fell, and was in 1994, 93 percent of its 1991 level (net fixed investment in 1994 was 82 percent of the 1991 level). The drop was particularly large in the manufacturing sector, which in 1994, was at 60 percent of its 1991 peak, and was barely above the pre-bubble level.

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<sup>28</sup>Robert Dekle, "Comment on Japanese Finance in the 1980s: A Survey," in *Trade with Japan: Has the Door Opened Wider?* edited by Paul Krugman (Chicago: The University of Chicago Press, 1991), p. 270.

<sup>29</sup>Juha Kahkonen, "Movements in Asset Prices Since the Mid-1980s," in *Saving Behavior and the Asset Price 'Bubble' in Japan*, edited by Ulrich Baumgartner and Guy Meredith, Analytical Studies (Washington, D.C.: International Monetary Funds, April 1995), pp 51-62.

<sup>30</sup>Dekle, p. 270.

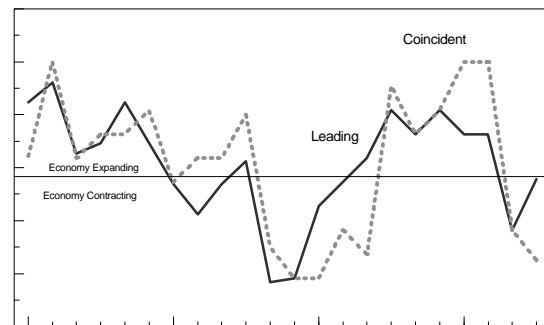
The Bank of Japan's attempts to stimulate the economy beginning in 1991 by repeatedly cutting nominal interest rates have been slow to succeed. The real interest rate has increased. Reductions in nominal rates have been offset by declining prices and possibly the expectation of further declines in nominal rates. The demand for credit remains depressed, and money supply (M2+CDs) has grown by only one or two percent per year since 1992. The demand for credit, however, has increased slightly in 1996.

The government has eased fiscal policy since 1992 by a series of tax cuts and spending increases. The fiscal balance dropped from a 3 percent of GDP surplus in 1991 to a 3.7 percent of GDP deficit in 1995 as successive stimuli failed to revive the economy. Unlike the situation during the bubble, when the Ministry of Finance was adding to savings -- helping reduce the cost of capital -- the government has been borrowing heavily, increasing the demand for capital. National saving declined by 2.9 percent of GDP between 1991 and 1994, relinquishing all of the increase it posted during the bubble. The decline in saving has been accommodated both by declining investment and by a reduction in capital flows overseas. The reduction in Japanese purchases of overseas assets, which previously balanced the trade surplus, has added to the upward pressure on the yen.

## CURRENT CONDITIONS: AN UNEASY RECOVERY FROM A LONG RECESSION

Economic conditions in Japan have improved considerably in the last six months and most forecasters believe a modest expansion phase<sup>31</sup> has been established. Positive indicators include:

- A sharp 12.7 percent annualized rate of GDP growth in the first quarter, 1996, bringing GDP up 5.7 percent from the same period of 1995. This rate is not expected to be sustained over 1996.
- Sharply rising corporate profits, especially in manufacturing, that are finally having a positive impact on private investment.
- After an anemic first quarter, industrial production rebounded 1.8 percent in the second quarter of 1996.
- Rising stock and bond prices, driven by exceptionally low interest rates. The Nikkei 225 index is up nearly 50 percent from its mid-1995 low; 10-year bonds yield only 3 percent.
- A weaker yen that is taking some pressure off competition for Japanese products in foreign and domestic markets. Export growth remains slow, however.
- Consumer spending improved modestly in the early months of 1996. Employment growth, however, weakened, leading to a record high jobless rate of 3.5 percent in May 1996.



Weakness remains in the real estate and banking sectors and in government fiscal policy which is set to become much less stimulatory in the next four quarters. Wide interest rate margins are helping banks cover the carrying costs of huge bad loan holdings but the banks remain reluctant to provide new credit to the economy. Probably the biggest risk to the expansion is the possibility that a rise in interest rates could cause new problems for the banks and force a renewed appreciation of the yen.

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<sup>31</sup> Expansion phase, as distinct from recession and recovery phases, is the portion of a business cycle in which the economy has fully recovered from a recession and where output is expanding in record territory.

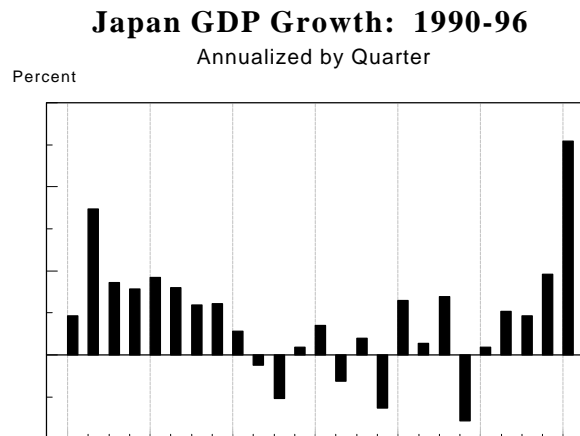
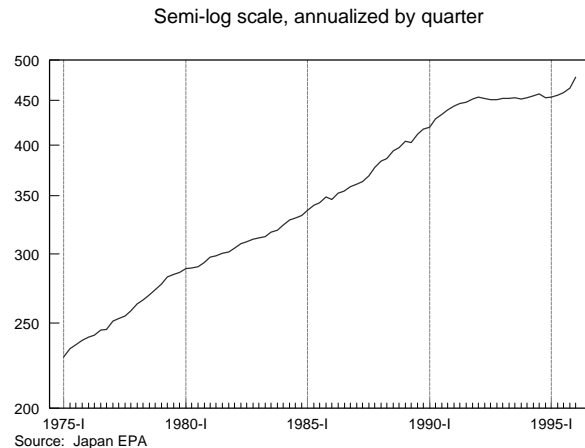


## THE RECESSION

This apparent recovery follows a prolonged four-year period (since first quarter, 1992) during which Japan has suffered from a "table top" recession. In contrast, the U.S. and most other OECD countries began their Gulf War era recessions earlier than Japan but rallied quickly to expansion phases within a year or at most a year and a half of the onset of their recessions.

Japan's recession has been remarkable mostly for its length rather than its severity. Previous Japanese recessions had been sudden, sharp, and short, and usually reflected a well defined cause--an oil price shock or a sudden yen appreciation.

- From its first quarter 1992 peak, Japanese GDP declined 1.2 percent to a trough six quarters later in fourth quarter 1993. GDP had more than recovered its cyclical decline by third quarter 1994 but then slipped badly in the fourth. Four consecutive quarterly gains in 1995 recouped that loss and brought the economy back into an expansion phase.
- GDP has been erratic from quarter to quarter over the past four years. Every time the economy seemed to achieve upward momentum, a new shock -- yen appreciation, the Kobe earthquake<sup>32</sup>, political uncertainty, banking failures -- entered the picture and upset consumer or investor confidence.
- Even now, with most data showing conditions to be improving, forecasters are wary about sounding



<sup>32</sup>A natural catastrophe such as an earthquake usually has a positive impact on GDP as GDP measures the reconstruction effort, not the losses that have taken place. In this very large Kobe earthquake, however, the negative impact on consumer confidence--since Japanese were surprised by the extent of damage and since all of Japan is subject to the same potential for disaster their savings rates increased--and the direct losses of reduced production and trade in this important industrial area, may have offset the normal reconstruction effort gains.

too confident about recovery lest they again be caught wrong. Of 21 leading forecasters in Japan polled by **Consensus Forecasts** in mid-July, the most optimistic sees 4.7 percent growth in 1996 and 2.9 percent in 1997. The average for the group is 3.6 percent and 1.8 percent growth in 1996 and 1997 respectively.

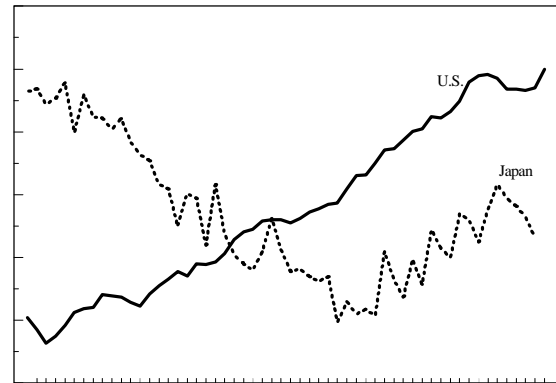
## **HARD-HIT INDUSTRY BEGINNING TO RECOVER**

Also unique to this recession is the degree to which the impact has been concentrated in the manufacturing and real estate sectors.

- Industrial production fell a severe 14 percent from its July 1991 peak before beginning to recover in October 1993. After a second dip in early 1995 -- induced by the Kobe earthquake and the strong yen -- output again appears to be on a recovery track.
- Much of the decline in industrial output in 1992 and 1993 was the result of sharply lower domestic spending for investment goods that are increasingly the mainstay of Japanese industry. The rebound in 1994 was helped by strong overseas and especially East Asian demand for these products.
- Slowing investment and faster depreciation of older equipment have reduced capacity growth in the industrial sector to a cumulative 3.1 percent over the past five years, according to the EPA capacity index. Utilization of capacity in first quarter, 1996 was 86.1 percent of the normal (average for 1990) utilization rate or about 75 percent of actual capacity.

### Japan: Corporate Profits, 1986Q1-1996Q1

Billion yen, SA



This recession has been very hard on Japan's manufacturing firms. Large investments in labor savings technology in the late 1980s -- in anticipation of a labor shortage later this decade (still a near certainty given a radical shift in the age structure of the population) -- contributed to the substantial overcapacity in plant and equipment which is now being depreciated at a heavy cost to corporate profits. Underutilization of physical capacity has been compounded by firms' reluctance to lay off redundant workers.

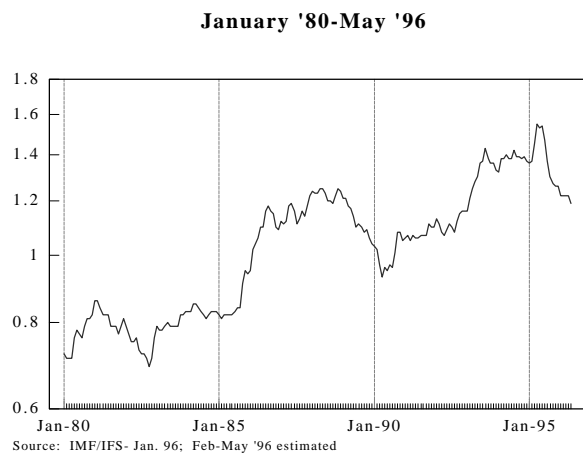
- Operating profits of all corporations fell in half from their peak 1989 level to their low point in fourth quarter, 1993.
- Profits have expanded steadily during the past two years except for a dip in early 1995 when profits were hurt by the Kobe earthquake. First quarter 1996 profits rose 25.4 percent from a year ago.

- Manufacturing profits have rebounded, up 29.8 percent in the first quarter of 1996 over the same period of 1995.

## PRODUCTIVITY RECOVERING FASTER THAN EMPLOYMENT

Japan's employment practices, in which employees tend to remain on payrolls even when there is little demand for their work, have played an important role in the wide swings in corporate profitability.<sup>33</sup> In 1992 and 1993, for example, yen denominated unit labor costs, a key influence on corporate profitability, rose nearly 10 percent and 6 percent respectively, as output declined and the number of workers remained level. Lower bonus payments and small pay increases could not offset the decline in revenue as had occurred in earlier recessions.

- In 1994, a rebound in production led to a rise in worker productivity and a 0.4 percent dip in unit labor costs. This improvement was partially offset, however, by the strengthening yen which sharply raised the US dollar cost of products traded on international markets.
- In the 12 months through October, 1995, yen denominated unit labor costs fell another 1.3 percent, which combined with a depreciation of the yen has brought the level of Japanese




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<sup>33</sup> The state unemployment security system pays firms to hold redundant workers in place, unlike the U.S. system which pays workers who are laid off. This in some sense artificially lowers the official unemployment rate and slows the adjustment of firms in a downsizing environment. The system encourages production even in a period of declining demand, however, by allowing firms to treat employment as a fixed rather than a marginal cost. The adjustment to lower demand thus occurs with lower prices or increased exports. In the U.S. system, especially in the auto industry, firms typically reduce production in response to declining demand, rather than lower prices or export excess production.

competitiveness -- as measured by the real effective exchange rate<sup>34</sup> of the yen -- back to about the end of 1992 level.

Thus, while Japan's relatively inflexible employment system makes it difficult for firms to lower costs in a recession, it allows production to rise quickly as soon as demand conditions allow. Since less than fully occupied (yet fully paid) workers suddenly become more productive, company profits rise sharply.

During this recovery, the effect of rising production on employment has been subdued. Just as the firms are reluctant to lay workers off in a downturn, they have been reluctant to hire new workers. With concern about unemployment high consumers have been reluctant to spend. This situation began changing in early 1996, however, as retail spending has increased, and employment has begun to increase--the unemployment rate fell back to 3.1 percent in April from a post-war high of 3.4 percent early in the year, but rose to an all-time high of 3.5 percent in May.

Employment issues may change in the next few years as production edges up toward capacity and as the working age population begins to shrink--the result of a sharp downturn in the number of new entrants to the workforce as the second wave of the huge post-war baby boom (those born from 1965-1975 and now in their 20s) levels out and as the original baby boom generation (1945-1955) reaches retirement age. Pensions, medical care, and employment costs are likely to become much more important issues than job creation and unemployment.

## INVESTMENT - UNCERTAINTY PREVAILS

Last year saw the first rise in investment spending by Japan's private sector in four years and early 1996 indicators appear positive for continued growth. Big changes in investment patterns, however, contribute to a lot of uneasiness over the course of Japan's economy over the next few years. For 1997, for example, **Consensus Forecasts'** poll of 16 major forecasters in Japan finds a wide range in expected business investment growth; from 0.9 percent expected by Tokai Bank to 10.7 percent expected by Merrill Lynch-Japan. Expectations for other key economic parameters are much more uniform.

Declines in investment spending over the previous three years were a major factor in Japan's recession. This pattern is in sharp contrast to the mid-1980s when Japanese firms reacted to a strong yen by greatly increasing plant and equipment spending, offsetting

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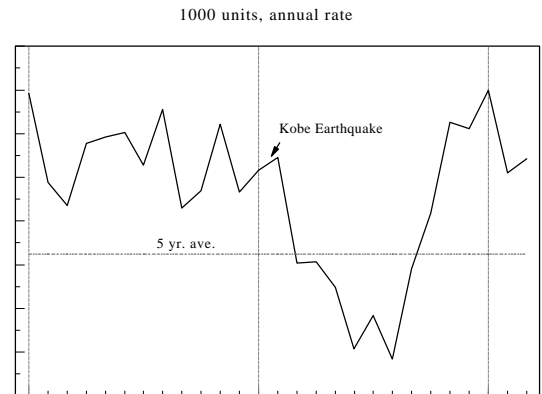
<sup>34</sup>The real effective exchange rate compensates for wage inflation and productivity changes to obtain a measure of how a nation's manufacturing competitiveness is changing. If, for example, a rise in the exchange rate is offset by a decline in wages or a rise in productivity relative to the country's trade partners, there will be no change in the effective exchange rate. Japan's 1.25 index in November means that Japan's labor costs have risen 25 percent relative to those of its major trade partners since January 1990, after compensating for wage and productivity changes.

weakness on the consumption side of the economy. During the early 1990s, in contrast, Japanese firms had seemed to give up on domestic production, choosing instead to invest heavily in neighboring East Asian countries. With industrial production now rising again, a key question for Japan is whether Japanese manufacturers will begin to expand capacity or continue to emphasize cost-cutting measures to improve their profit margins.

Private fixed capital formation appears to have reached a cyclical low in the last quarter of 1994, while edging up unevenly over the course of the last year and a half.

- Private plant and equipment investment rose 1.5 percent in the first quarter of 1996, following a 2.3 percent rise in the previous quarter.
- The investment climate continued to improve in the second quarter of 1996. Seasonally adjusted machinery orders rose 17.9 percent in April.

The construction sector is rebounding, helped by record low interest rates. May 1996 data show strong year-on-year increases in construction starts (+21.5 percent) and housing starts (+18.1 percent). Housing has been especially weak during the past three years, as sharply dropping real estate prices and major problems in the housing mortgage business discouraged construction. Adding to these problems, housing starts fell sharply in the six months following the January 1995 Kobe earthquake, as public concern over building standards across all of Japan hampered expansion. Fourth quarter 1995 saw a 13 percent seasonally adjusted increase in unit starts from the third quarter, partly due to publicly financed construction in the Kobe area. Mortgage rates have declined to 4 percent, still high given the zero to negative growth in prices.



## PRICE DISINFLATION

Zero to negative inflation conditions over the past 2 years have greatly reduced the incentive for Japanese to invest in real property or in businesses even as short and long-term interest rates have dropped to record lows. Several factors have influenced the abnormal behavior of Japanese prices:

- A deliberate effort by Japan's financial authorities to eliminate asset price inflation by lifting interest rates to very high real levels in 1991.

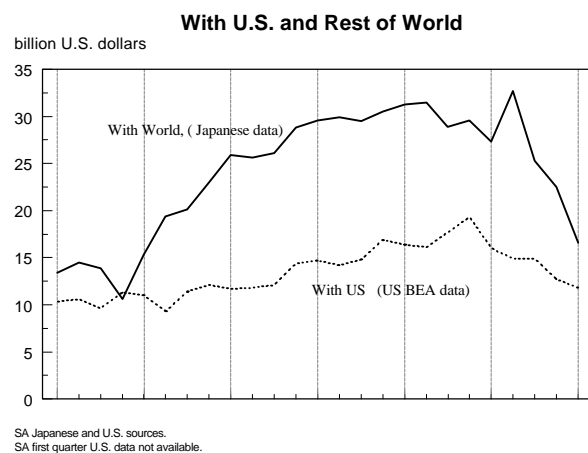
- Declining world-wide commodity prices, especially for energy, for which Japan is a major importer.
- A strong yen, at least through mid-1995, which brought down the price of all imported goods and put pressure on Japanese suppliers to the domestic market.
- Weak demand conditions in Japan and huge surplus capacity brought on by the massive factory investments of the mid to late 1980s.
- A slow but gradual process of market liberalization in Japan's retailing sector in which discount stores have taken substantial market share from the high-cost department stores.

Several of these factors have changed within the past few months--especially a sharp decline in the yen--and consumer prices have stopped falling--the Tokyo consumer price index rose 0.6 percent in April and was up 0.3 percent from a year earlier. Real estate prices, however, still appear to be declining in some cities.

Despite the absence of price increases, Japan's price levels remain much higher than other OECD economies. In March, 1996, with the yen valued at 105.8 per US dollar, according to OECD estimates, Japanese consumer prices were 77 percent higher than U.S. consumer prices, and vied with Switzerland as the world's highest.

## A DECLINING TRADE SURPLUS

Strong import growth of 14 percent in 1994 and 22 percent in 1995 (US dollar terms) have succeeded in making a major dent in Japan's global trade surplus. Exports increased by a more modest 9 percent and 12 percent respectively in 1994 and 1995. First quarter 1996 data showed a further narrowing in the surplus to \$16.6 billion, about half the level of the past 4 years.



- Most of last year's import growth occurred in the first half of the year as the yen was climbing to very high levels. Imports were essentially flat in the second half.
- Export growth was even faster than import growth in the first half of 1995 but exports as measured in dollars declined sharply in the second half as the yen declined in value.

The volatility seen in the dollar measurement of exports last year is in part due to the exchange rate effect. About half of Japan's exports are denominated in yen so a rise in the yen immediately raises the dollar value of exports whereas a decline in the yen lowers the dollar value of exports. (Since almost all of Japan's imports are denominated in U.S. dollars, there is not an equivalent measurement problem with imports).

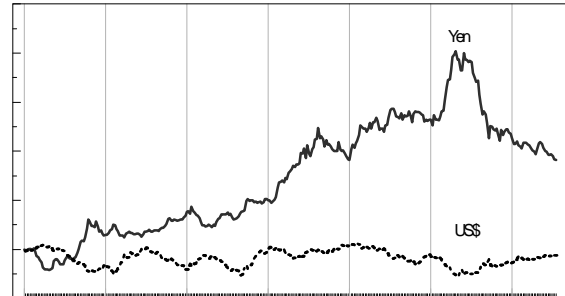
A turnaround in Japan's surplus with the United States has been slower in coming, but appears to be in full swing in 1996. In the first five months of 1996, nonseasonally adjusted U.S. data show a Japanese trade surplus of \$19.0 billion in contrast to a year earlier surplus of \$27 billion.

Weak export growth and strong import growth in constant yen terms--in which the exchange rate phenomena is taken out--has accounted for a 1 percent reduction in Japan's GDP over the past three years. Forecasters seem to be divided over whether trade will continue to be a drag on GDP growth this year. The weaker yen since last summer should be a boost to exports but all of Japan's large foreign markets are likely to see slower demand growth this year. Japanese imports, moreover, are expected to increase as domestic demand recovers.

## THE YEN EXCHANGE RATE

Sharp fluctuations in the value of the yen have strongly affected Japan's current business cycle. Net exports dropped sharply in 1994, responding to a 17 percent trade-weighted rise in the yen in 1993. Without that yen appreciation, many analysts believe the economy would have pulled itself into a normal recovery pattern; instead it stayed flat. Again, in early 1995 the yen soared--rising a further 17 percent in the first five months of the year--and appeared to cut off recovery.

With only 80 yen buying a dollar by April, MITI and other industrial associations figured that very few Japanese-made products could compete profitably overseas. Coming on top of the Kobe earthquake, renewed concerns about the stability of major banks, and deflating prices, this yen "shock" sent consumer and investor confidence plummeting. More recently, this process seems to have reversed as a big drop in the trade-weighted yen over the past year to about the mid-1993 level, has raised business confidence and apparently has moved the economy again toward expansion.



At 105 yen per dollar, the yen is still estimated to be about 70 percent overvalued against the U.S. dollar on a purchasing power parity basis but is probably at least out of the



crisis range for most major Japanese manufacturers.<sup>35</sup> With zero or even negative cost pressures and plenty of excess capacity in plant and equipment and in labor supply, unit production costs are falling. This puts Japanese firms in a better position now to cope with a 100-110 yen to 1 U.S. dollar exchange rate than they were a few years ago.

With the yen exchange rate playing such an important role in staging the economic expansion, most forecasters are hedging their bets by predicting a stable yen-dollar rate over the next year. The Bank of Japan and the Ministry of Finance appear firm in their determination to prevent a renewed appreciation that could be set in motion by rising interest rates fed by the economic expansion. The current relatively easy money policy is thus expected to persist through 1996. A big rise in public borrowing demands this year, however, is putting some upward pressure on long-term interest rates raising the possibility of a public sector deficit induced rise in the yen. Meanwhile, with the country's long and short-term capital flows in near balance, most of the current account surplus is being added to Japan's already huge foreign exchange reserves.

## **GOVERNMENT POLICY - NO LONGER CONSERVATIVE BUT LACKING RESPECT**

Japan's monetary authorities were slow to recognize the onset of the recession in 1992 --many analysts argue that they in fact precipitated the recession by pushing up interest rates in 1991--while instability in the Diet slowed action on fiscal and regulatory fronts. Despite criticism, however, since 1993 Tokyo has acted forcefully on both monetary and fiscal fronts.

- Successive stimulus packages have moved Japan's fiscal stance from a positive 3.5 percent of GDP in FY 1991 to an expected negative 3.2 percent of GDP in FY 1995 (April 95-March 96)--a larger deficit to GDP ratio than in the U.S. (2.3 percent).
- The latest stimulus package announced last fall is focused largely on public works spending and will push the government further into debt in 1996.
- Since January 1994, the Bank of Japan has joined in with steep cuts in its short-term lending rates, lowering the discount rate to only 0.5 percent. In the present interest rate environment, the relatively wide spread between the banking sector's cost of credit and its lending rates is helping to ease the banking crisis.
- In recent months the Bank of Japan also has moved aggressively to bring the yen down to a more competitive rate.

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<sup>35</sup>Purchasing power parity (PPP) basis--a valuation of a currency in terms of another (in this case the U.S. dollar) that would equalize costs between the two countries for a large basket of goods and services. PPP is at best an inexact estimate and does not take into account important macroeconomic differences between economies--for instance if both U.S. and Japanese global trade were in balance, U.S. prices would look higher and Japanese prices a lot lower, helping to bring the PPP rate closer to the market rate.

With little more to be done in terms of fiscal or monetary policy stimulus, the new Hashimoto government is trying to focus on more politically divisive issues including resolution of the enormous bad debt problem in the banking sector and in deregulating the still highly structured services sectors of the economy. Early indications of the government's efforts illustrate how difficult this process may be as the public treats with disdain any proposals to use public funds to bail out what are widely perceived to be corrupt institutions. Government officials and politicians past links to those institutions further detract from confidence in the government.